

IN THE CLAIMS:

**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims**

1-9. (Cancelled)

<sup>1</sup> 10. (Currently Amended): A method of treating arthritis ~~an autoimmune disorder~~ in a subject comprising administering to the subject an antibody or antigen-binding fragment thereof that binds to interleukin-22 (IL-22) in an amount sufficient to treat the arthritis ~~autoimmune disorder~~ in the subject.

11. (Cancelled)

<sup>2</sup> 12. (Currently Amended): The method of claim <sup>1</sup>10, wherein said arthritis ~~autoimmune disorder~~ is selected from the group consisting of rheumatoid arthritis, osteoarthritis, ~~multiple sclerosis, myasthenia gravis, Crohn's disease, inflammatory bowel disease, lupus-associated arthritis and psoriatic arthritis, diabetes and psoriasis.~~

<sup>1</sup> 12 13. (Currently Amended): The method of claim <sup>1</sup>10, wherein said arthritis ~~autoimmune disorder~~ is rheumatoid arthritis.

<sup>5 1 2 12</sup> 13 14. (Currently Amended): The method of any of claim 10, 12, or 13, wherein said antibody is a neutralizing anti-IL-22 antibody or an antigen-binding fragment thereof.

15. (Cancelled)

<sup>13</sup> 14 16. (Original): The method of claim <sup>13</sup>14, wherein said subject is a human.

<sup>20</sup> 17. (Previously Presented): A method of ameliorating symptoms associated with arthritis, comprising administering to a subject an antibody or antigen-binding fragment thereof that binds to IL-22 in an amount sufficient to ameliorate the symptoms in the subject.

<sup>20</sup>  
21 ~~16~~. (Currently Amended): The method of claim ~~17~~, wherein said arthritis is selected from the group consisting of rheumatoid arthritis, osteoarthritis, lupus-associated arthritis and psoriatic arthritis.

<sup>20</sup>  
22 ~~16~~. (Currently Amended): The method of claim ~~17~~, wherein said IL-22 antibody, or antigen-binding fragment thereof, is administered therapeutically.

<sup>20</sup>  
23 ~~20~~. (Currently Amended): The method of claim ~~17~~, wherein said IL-22 antibody, or antigen-binding fragment thereof, is administered prophylactically.

21-33 (Cancelled)

<sup>2</sup>  
3 34. (Previously Presented): The method of claim ~~12~~, wherein said IL-22 comprises an amino acid sequence that is at least 90% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

<sup>2</sup>  
4 ~~36~~. (Previously Presented): The method of claim ~~12~~, wherein said IL-22 comprises an amino acid sequence that is at least 95% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

<sup>2</sup>  
5 ~~36~~. (Previously Presented): The method of claim ~~12~~, wherein said IL-22 comprises the amino acid sequence of amino acids 34-179 of SEQ ID NO:2.

<sup>2</sup>  
7 ~~37~~. (Previously Presented): The method of claim ~~12~~, wherein said IL-22 comprises the amino acid sequence of SEQ ID NO:2.

<sup>2</sup>  
8 ~~38~~. (Previously Presented): The method of claim ~~12~~, wherein said antibody, or antigen-binding fragment thereof, binds to a fragment of IL-22 comprising an amino acid sequence selected from the group consisting of amino acids 50-60, 63-81, 84-93, and 168-177 of SEQ ID NO:2.

<sup>5 20 21 22 23</sup>  
24 ~~39~~. (Currently Amended): The method of any of claims ~~17~~, ~~18~~, ~~19~~, or ~~20~~, wherein said antibody, or antigen-binding fragment thereof, is a neutralizing antibody.

<sup>2</sup>  
9 ~~40~~. (Previously Presented): The method of claim ~~12~~, wherein said antibody, or antigen-binding fragment thereof, is selected from the group consisting of a monoclonal antibody, a polyclonal antibody, a chimeric antibody, a single-chain antibody, a CDR-grafted antibody and a humanized antibody.

<sup>9</sup>  
10 ~~41~~. (Previously Presented): The method of claim ~~40~~, wherein said antibody, or antigen-binding fragment thereof, is a monoclonal antibody.

<sup>2</sup>  
11 ~~42~~. (Previously Presented): The method of claim ~~12~~, wherein said antibody, or antigen-binding fragment thereof, is a human antibody.

<sup>41</sup>  
41 ~~43~~. (Currently Amended): A method of treating rheumatoid arthritis in a subject, comprising administering to the subject an antibody or antigen-binding fragment thereof that binds to IL-22 in an amount sufficient to treat the rheumatoid arthritis ~~autoimmune disorder~~ in the subject, wherein said IL-22 comprises an amino acid sequence that is at least 90% identical to amino acids 34-179 of SEQ ID NO:2 and is capable of inducing the phosphorylation of a Stat-3 protein.

<sup>41</sup>  
42 ~~44~~. (Previously Presented): The method of claim ~~43~~, wherein said IL-22 comprises an amino acid sequence that is at least 95% identical to amino acids 34-179 of SEQ ID NO:2 and is capable of inducing the phosphorylation of a Stat-3 protein.

<sup>41</sup>  
43 ~~45~~. (Previously Presented): The method of claim ~~43~~, wherein said IL-22 comprises the amino acid sequence of amino acids 34-179 of SEQ ID NO:2.

<sup>20</sup>  
27 ~~46~~. (Previously Presented): The method of claim ~~17~~, wherein said IL-22 comprises an amino acid sequence that is at least 90% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

<sup>20</sup>  
28 ~~47~~. (Previously Presented): The method of claim ~~17~~, wherein said IL-22 comprises an amino acid sequence that is at least 95% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

<sup>20</sup>  
29 ~~48~~. (Previously Presented): The method of claim ~~17~~, wherein said IL-22 comprises the amino acid sequence of amino acids 34-179 of SEQ ID NO:2.

<sup>20</sup>  
31 ~~49~~. (Previously Presented): The method of claim ~~17~~, wherein said IL-22 comprises the amino acid sequence of SEQ ID NO:2.

<sup>20</sup>  
32 ~~50~~. (Previously Presented): The method of claim ~~17~~, wherein said antibody, or antigen-binding fragment thereof, binds to a fragment of IL-22 comprising an amino acid

sequence selected from the group consisting of amino acids 50-60, 63-81, 84-93, and 168-177 of SEQ ID NO:2.

<sup>20</sup>  
33 ~~51~~. (Previously Presented): The method of claim ~~17~~, wherein said antibody, or antigen-binding fragment thereof, is selected from the group consisting of a monoclonal antibody, a polyclonal antibody, a chimeric antibody, a single-chain antibody, a CDR-grafted antibody and a humanized antibody.

<sup>33</sup>  
34 ~~52~~. (Previously Presented): The method of claim ~~51~~, wherein said antibody, or antigen-binding fragment thereof, is a monoclonal antibody.

<sup>20</sup>  
35 ~~53~~. (Previously Presented): The method of claim ~~17~~, wherein said antibody, or antigen-binding fragment thereof, is a human antibody.

<sup>20</sup>  
36 ~~54~~. (Previously Presented): The method of claim ~~17~~, wherein said arthritis is psoriatic arthritis.

<sup>41</sup>  
45 ~~55~~. (Previously Presented): The method of claim ~~43~~, wherein said antibody, or antigen-binding fragment thereof, binds to a fragment of IL-22 comprising an amino acid sequence selected from the group consisting of amino acids 50-60, 63-81, 84-93, and 168-177 of SEQ ID NO:2.

<sup>41</sup>  
46 ~~56~~. (Previously Presented): The method of claim ~~43~~, wherein said antibody, or antigen-binding fragment thereof, is selected from the group consisting of a monoclonal antibody, a polyclonal antibody, a chimeric antibody, a single-chain antibody, a CDR-grafted antibody and a humanized antibody.

<sup>46</sup>  
47 ~~57~~. (Previously Presented): The method of claim ~~56~~, wherein said antibody, or antigen-binding fragment thereof, is a monoclonal antibody.

<sup>41</sup>  
48 ~~58~~. (Previously Presented): The method of claim ~~43~~, wherein said antibody, or antigen-binding fragment thereof, is a human antibody.

<sup>41</sup>  
49 ~~59~~. (Previously Presented): The method of claim ~~43~~, wherein said antibody, or antigen-binding fragment thereof, is a neutralizing antibody.

<sup>13</sup>  
15 ~~60~~. (Previously Presented): The method of claim ~~14~~, wherein said antibody, or antigen-binding fragment thereof, neutralizes IL-22 binding with an ED<sub>50</sub> of about 5nM detected by an enzyme-linked immunoabsorbant assay (ELISA).

<sup>24</sup>  
25 ~~61~~. (Previously Presented): The method of claim ~~39~~, wherein said antibody, or antigen-binding fragment thereof, neutralizes IL-22 binding with an ED<sub>50</sub> of about 5nM detected by an enzyme-linked immunoabsorbant assay (ELISA).

<sup>49</sup>  
50 ~~62~~. (Previously Presented): The method of claim ~~59~~, wherein said antibody, or antigen-binding fragment thereof, neutralizes IL-22 binding with an ED<sub>50</sub> of about 5nM detected by an enzyme-linked immunoabsorbant assay (ELISA).

Please add new claims 63-76:

<sup>1</sup>  
16 ~~63~~. (New): The method of claim ~~10~~, wherein said arthritis is psoriatic arthritis.

<sup>1</sup>  
17 ~~64~~. (New): The method of claim ~~10~~, wherein said arthritis is osteoarthritis.

<sup>1</sup>  
18 ~~65~~. (New): The method of claim ~~10~~, wherein said arthritis is associated with lupus.

<sup>1</sup>  
19 ~~66~~. (New): The method of claim ~~10~~, wherein said antibody or antigen-binding fragment thereof is administered subcutaneously or intravenously.

<sup>20</sup>  
37 ~~67~~. (New): The method of claim ~~17~~, wherein said arthritis is rheumatoid arthritis.

<sup>20</sup>  
38 ~~68~~. (New): The method of claim ~~17~~, wherein said arthritis is osteoarthritis.

<sup>20</sup>  
39 ~~69~~. (New): The method of claim ~~17~~, wherein said arthritis is associated with lupus.

<sup>20</sup>  
40 ~~70~~. (New): The method of claim ~~17~~, wherein said antibody or antigen-binding fragment thereof is administered subcutaneously or intravenously.

<sup>24</sup>  
26 ~~71~~. (New): The method of claim ~~39~~, wherein said subject is a human.

<sup>41</sup>  
52 ~~72~~. (New): The method of claim ~~43~~, wherein said antibody or antigen-binding fragment thereof is administered subcutaneously or intravenously.

<sup>49</sup>  
51 ~~73~~. (New): The method of claim ~~59~~, wherein said subject is a human.

5  
6 ~~74~~. (New): The method of claim ~~36~~, wherein the subject is a human.

43  
44 ~~75~~. (New): The method of claim ~~45~~, wherein the subject is a human.

29  
30 ~~76~~. (New): The method of claim ~~46~~, wherein the subject is a human.